

What is claimed is:

1. A color cathode ray tube including a panel to display image, a neck where electron gun is housed and a funnel which connect the panel and the neck,

an outer surface of the panel having a film is formed substantially flat, an inner surface of the panel having a phosphor layer has a curvature, and a wall thickness differs between a center portion and a peripheral portion of the panel, wherein

the panel formed of a tinted glass,

a peripheral transmissivity ratio which is a ratio of transmissivities of the peripheral portion and the central portion of the panel before the film is set to a value not greater than 60%, and

body color of the panel is set such that

$L^* = 30$  to  $40$ ,  $a^* = -8.5$  to  $1.5$ ,  $b^* = -5$  to  $5$  at the center portion, and

$L^* = 13.5$  to  $23.5$ ,  $a^* = -7.5$  to  $2.5$ ,  $b^* = -6.5$  to  $3.5$  at the peripheral portion,

where color difference is set to  $\Delta a^* b^* \leq 3$ , and

the film formed on the outer surface of the panel is constituted of a wavelength selective absorption layer which is thick at the panel center portion and thin at the panel peripheral portion and an electrical conductive layer which is

formed over the wavelength selective absorption layer, and

the transmissivity ratio at the panel peripheral portion after the formation of the film is set to a value not less than 60% and the color difference is set to satisfy a following relationship

the color difference  $\Delta a^*b^*$  after the formation of the film  $\leq$  color difference  $\Delta a^*b^*$  before the formation of the film.

2. A color cathode ray tube according to claim 1, wherein with respect to the electronic conductive layer, the transmissivity at the panel center portion is expressed by

$$70\% \leq T(550) \leq 90\%, \text{ and}$$

where  $T(550)$  is the transmissivity at a wavelength of 550nm,

the chromaticity of transmitting light at the panel center portion when an incident light to the panel from an ambient light is set as a D65 standard light has the gradation expressed by

$$-1 \leq a^* \leq 2.5$$

$$-4 \leq b^* \leq -0.5.$$